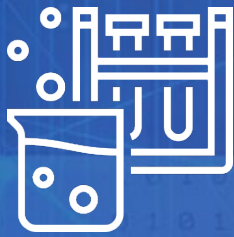


Lab Assignment & Solution



Cybersecurity Professional Program
Introduction to Python
for Security

Loops

PY-03-LS1
Range Loop

Note: Solutions for the instructor are shown inside the green box.



Lab Objective

Understand how to work with loops and the range function in a script.



Lab Mission

Practice how to create a range with various inputs in a loop.



Lab Duration

10 – 20 minutes



Requirements

- Basic knowledge of loops and the range function.



Resources

- Environment & Tools
 - Windows, macOS
 - Python 3
 - PyCharm



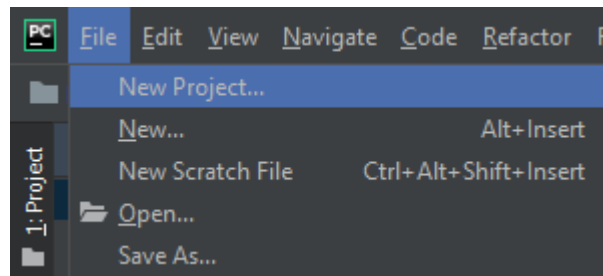
Textbook References

- Chapter 3: Loops
 - Section 1: For & While

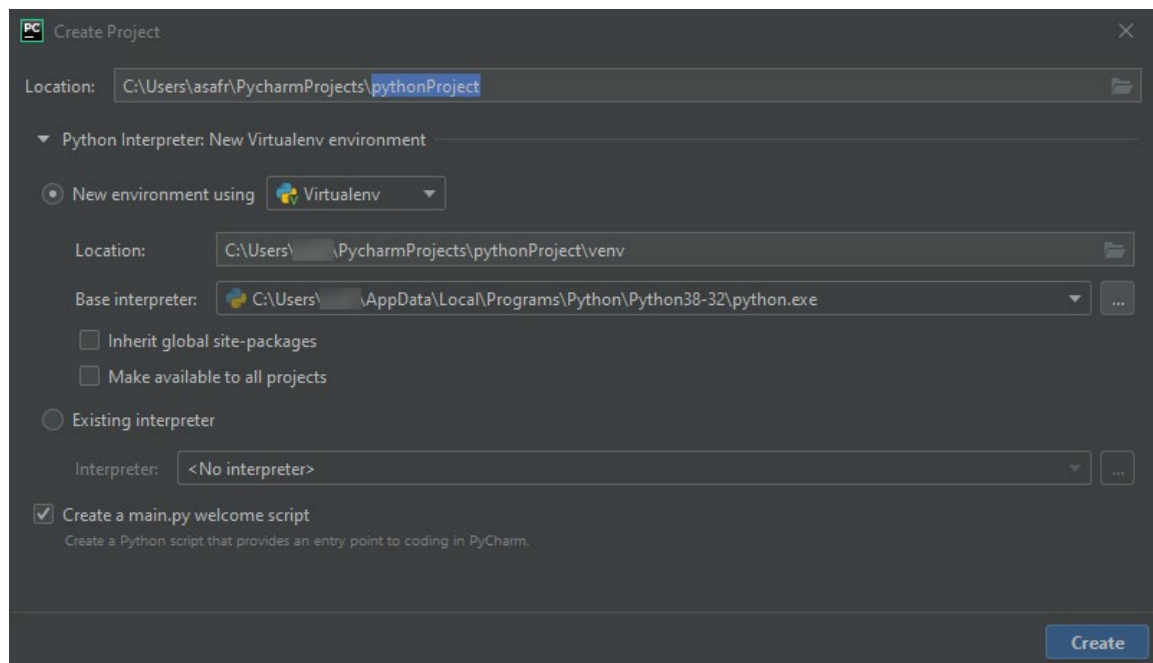
Lab Task: Range Loop

Write code in which the range function is modified in accordance with input from the user.

- 1 Open PyCharm, click **File** at the top left, and select **New Project**.



- 2 Give the new project a name, and click **Create**.



- 3 Create a variable that gets a number from the user to be used as the *range* function's upper limit.

```
upper_bound = input("Choose the range upper bound --> ")
```

- 4 Convert the input to an integer.

```
upper_bound = int(input("Choose the range upper bound --> "))
```

- 5 Create a *for* loop with the range function, where its starting point is 1, and its upper limit is the input from the user in the previous step.

```
upper_bound = int(input("Choose the range upper bound --> "))  
for x in range(1, upper_bound):
```

- 6 Add a print function in the *for* loop that prints the result of each iteration.

```
upper_bound = int(input("Choose the range upper bound --> "))  
for x in range(1, upper_bound):  
    print("The next number in line is {}".format(x))
```